



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/447,024	11/22/1999	LUBOMIR D. BOURDEV	07844/3420001	3275

21876 7590 06/10/2004

FISH & RICHARDSON P.C.
3300 DAIN RAUSCHER PLAZA
MINNEAPOLIS, MN 55402

EXAMINER

WALLACE, SCOTT A

ART UNIT	PAPER NUMBER
----------	--------------

2671

2/

DATE MAILED: 06/10/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/447,024

Applicant(s)

BOURDEV ET AL.

Examiner

Scott Wallace

Art Unit

2671

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 March 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,5-11,15,19-24 and 28 is/are rejected.
- 7) ☒ Claim(s) 2-4,12-14,16-18 and 25-27 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 18 12/22/03.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

Response to Arguments

1. Applicant's arguments filed 03/08/04 have been fully considered but they are not persuasive. The applicant argues "lines 29-40 of column 6 and fig. 5B do not disclose "determining the number of primitives that map to a cell and identifying the region as complex by the number of primitives in the region"" and that Greene at best identifies the cell as complex based on visible outlines because the hidden outlines are culled. However, the claim states mapping outlines of at least one of the pieces of artwork onto a grid of cells. Even if Greene only maps the visible outlines this is still at least one of the pieces of artwork, therefore this still reads on the claim language.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1, 5-11, 15, 19-24, 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Greene et al., U.S. Patent No. 5,600,763.

4. As per claims 1 and 15, Greene et al discloses a computer-based method of processing a computer graphics illustration that includes one or more pieces of artwork (fig 5B, column 6 lines 29-40), the method comprising: mapping outlines of at least one of the pieces of artwork onto a grid of cells (fig 5B). However, Greene et al does not specifically disclose determining the total number of outlines of pieces of artwork that map to a cell of the grid; and identifying the cell as a complex region based on the total number of outlines that map to the cell. Greene et al does disclose determining the number of primitives that map to a cell and identifying the region as complex by the number of primitives in the region in column 6 lines 29-40 and fig. 5B. It would have been obvious to one of ordinary skill in the art at

the time the invention was made to use the outlines of the primitives because when determining the number of pieces of artwork it is easier to separate the different pieces by the outline of the pieces as seen in fig. 5B. That way you can determine the total number of primitives and therefore the complexity of the region.

5. As per claims 5 and 22, Greene et al discloses wherein mapping comprises drawing the outlines using a rasterization engine function (column 1 lines 33-40).

6. As per claims 6 and 19, Greene et al discloses wherein identifying comprises comparing the total number of outlines of pieces of artwork that map to the cell with a threshold (column 6 lines 29-40).

7. As per claims 7 and 21, Greene et al discloses wherein the threshold is based on user input (abstract).

8. As per claims 8 and 20, Greene et al discloses a dynamically determined threshold (abstract).

9. As per claims 9 and 28, Greene et al does not specifically disclose wherein the illustration has a first associated resolution and the grid has a second resolution, the second resolution being less than the first resolution. It would have been obvious to one of ordinary skill in the art at the time of applicants invention that the illustration will have an associated resolution. When the illustration is mapped to a planar grid of cells, this grid of cells will also have an associated resolution. The invention states a process for looking at the grid and picking out cells with a determined number of lines from the artwork going thru it. If the resolution of the grid is greater than the illustration resolution then it would be difficult to pick out a cell with more than one artwork line going thru it. But if the resolution of the grid is less than the illustration resolution than it would be easier to find a cell with more than one artwork line going thru it. Being able to determine if more than one line goes thru a cell helps in determining if the cell is complex or not. Therefore it would be advantageous if the resolution of the grid is less than the illustration resolution. This would be obvious to one skilled in the art since the object of the invention is to be able to tell if the cell is complex or not.

10. As per claims 10 and 23, Greene et al discloses wherein the determining comprises determining using a rasterization engine function (column 1 lines 33-40).

11. As per claims 11 and 24, Greene et al discloses further classifying at least one of the pieces of artwork based on the intersection of the piece of artwork with the complex region (fig 5B and column 6 lines 29-40).

Allowable Subject Matter

12. Claims 2-4, 12-14, 16-18, 25-27 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

13. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks
Washington, D.C. 20231

or faxed to:

(703) 872-9314 (for Technology Center 2600 only)


Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Scott Wallace whose telephone number is 703-605-5163. The examiner can normally be reached on Monday thru Friday from 8:30am to 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Zimmerman, can be reached on 703-305-9798. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


MARK ZIMMERMAN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600